

Claims

1-13. cancelled.

14. (currently amended) A method of signal processing to determine a message in a multiplexed digital signal, the multiplexed digital signal including a voice channel assignment subchannel for voice channel assignment signals, and a short messaging subchannel for short messaging signals, the method comprising the following steps:

- (A) receiving the multiplexed digital signal;
- (B) demultiplexing the multiplexed digital signal to generate a short messaging signal and a voice channel assignment signal;
- (C) screening the voice channel assignment signal from further processing; and
- (D) determining the message from decoding the short messaging signal to obtain the message.

15. (original) The method of claim 14, wherein:

the multiplexed digital signal is presented in a TDMA format.

16. (original) The method of claim 14, wherein:

the voice channel assignment subchannel and the short messaging subchannel are time-division multiplexed in the digital signal.

17. (original) The method of claim 14, wherein:

the multiplexed signal includes a series of one or more frames.

18. (currently amended) A method of receiving a message on a digital control channel for use in a cellular messaging network, comprising the steps of:

- (A) receiving voice channel assignment signals related to the assignment of voice channels and short messaging signals based on the message from the digital control channel;
- (B) distinguishing between the voice channel assignment signals and the short

messaging signals; and

- (C) discarding the voice channel assignment signals; and
- (D) decoding the short messaging signals to obtain the at least one message.

19. (previously presented) The method of claim 18, wherein:

the voice channel assignment signals and the short messaging signals are time-division multiplexed in the digital control channel.

20. (previously presented) The method of claim 18, wherein step (A) comprises the step of:

demultiplexing the digital control channel.

21. (previously presented) The method of claim 18, further comprising the step of: paging a receiver in the cellular messaging network using the short messaging signals.

22. (new) A method of receiving at least one message on a digital control channel for use in a cellular messaging network, comprising the steps of:

(A) receiving voice channel assignment signals related to the assignment of voice channels and short messaging signals based on the message from the digital control channel;

(B) distinguishing between the voice channel assignment signals and the short messaging signals;

(C) discarding the voice channel assignment signals; and

(D) rebroadcasting the short message signals.

23. (new) The method of claim 22, wherein:

the voice channel assignment signals and the short messaging signals are time-division multiplexed in the digital control channel.

24. (new) The method of claim 22, wherein step (A) comprises the step of: demultiplexing the digital control channel.
25. (new) The method of claim 18, further comprising the step of: paging a receiver in the cellular messaging network using the short messaging signals.
26. (new) A method of signal processing to determine a message in a multiplexed digital signal, the multiplexed digital signal including a voice channel assignment subchannel for voice channel assignment signals, and a short messaging subchannel for short messaging signals, the method comprising the following steps:
 - (A) receiving the multiplexed digital signal;
 - (B) demultiplexing the multiplexed digital signal to generate a short messaging signal and a voice channel assignment signal;
 - (C) screening the voice channel assignment signal from further processing; and
 - (D) rebroadcasting the short messaging signal.
27. (new) The method of claim 26, wherein:
the multiplexed digital signal is presented in a TDMA format.
28. (new) The method of claim 26, wherein:
the voice channel assignment subchannel and the short messaging subchannel are time-division multiplexed in the digital signal.
29. (new) The method of claim 16, wherein:
the multiplexed signal includes a series of one or more frames.